EFFICACY REVIEW

DATE: IN11-12-96 OUT 2-14-97

SUBMISSION PURPOSE Provide performance data in support of claims to control deer tick larvae and nymphs and American dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo- propanecarboxylate* 7.9% *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of.§ 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and di- rections. Similarly, the data presented in MRID No. 441374-02,	FILE OR REG. NO. 279-3162
DATE OF SUBMISSION ACCEPTED TYPE PRODUCT(S): (I,)D, H, F, N, R, S DATA ACCESSION NO(S). 441374-01 & -02; D231346; S514249; Case # 039818; AC:305 PRODUCT MGR. NO. 13-LaRocca/Heyward PRODUCT NAME(S) Talstar® Lawn & Tree Flowable Insecticide/Miticide COMPANY NAME FMC Corporation Agricultural Products Group SUBMISSION PURPOSE Provide performance data in support of claims to control deer tick larvae and nymphs and American dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo- propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a) (1) and (6) on p. 267, requirements of § 95-11(b) (1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(b) (1), (3)-(4) and (6)-(7) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a) (1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and di- rections. Similarly, the data presented in MRID No. 441374-02,	PETITION OR EXP. PERMIT NO.
TYPE PRODUCT(S): (I,)D, H, F, N, R, S DATA ACCESSION NO(S). 441374-01 & -02; D231346; S514249; Case # 039818; AC:305 PRODUCT MGR. NO. 13-LaRocca/Heyward PRODUCT NAME(S) Talstar® Lawn & Tree Flowable Insecticide/Miticide COMPANY NAME FMC Corporation Agricultural Products Group SUBMISSION PURPOSE Provide performance data in support of claims to control deer tick larvae and nymphs and American dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1.1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo- propanecarboxylate* 7.9% *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of \$ 95-11(a) (1) and (6) on p. 267, requirements of \$ 95-11(c) (2) (i) and (ii) (A) (b) on p. 270 of the Product Performance Guidelines as well as the application technique of, \$ 95-4(a) (1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and di- rections. Similarly, the data presented in MRID No. 441374-02.	DATE DIV. RECEIVED October 16, 1996
TYPE PRODUCT(S): (I,)D, H, F, N, R, S DATA ACCESSION NO(S). 441374-01 & -02; D231346; S514249; Case # 039818; AC:305 PRODUCT MGR. NO. 13-LaRocca/Heyward PRODUCT NAME(S) Talstar® Lawn & Tree Flowable Insecticide/Miticide COMPANY NAME FMC Corporation Agricultural Products Group SUBMISSION PURPOSE Provide performance data in support of claims to control deer tick larvae and nymphs and American dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo- propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of \$ 95-11(a) (1) and (6) on p. 267, requirements of \$ 95-11(b) (1), (3)-(4) and (6)-(7) on p. 268 and the standard of \$ 95-11(c) (2) (i) and (ii) (A) (b) on p. 270 of the Product Performance Guidelines as well as the application technique of \$ 95-4(a) (1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and di- rections. Similarly, the data presented in MRID No. 441374-02,	DATE OF SUBMISSION October 15, 1996
DATA ACCESSION NO(S). 441374-01 & -02; D231346; S514249; Case # 039818; AC:305 PRODUCT MGR. NO. 13-LaRocca/Heyward PRODUCT NAME(S) Talstar® Lawn & Tree Flowable Insecticide/Miticide COMPANY NAME FMC Corporation Agricultural Products Group SUBMISSION PURPOSE Provide performance data in support of claims to control deer tick larvae and nymphs and American dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo- propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and di- rections. Similarly, the data presented in MRID No. 441374-02,	DATE SUBMISSION ACCEPTED
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CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo-propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and directions. Similarly, the data presented in MRID No. 441374-02,	PRODUCT NAME(S) Talstar® Lawn & Tree Flowable Insecticide/Miticide
control deer tick larvae and nymphs and American dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo- propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and di- rections. Similarly, the data presented in MRID No. 441374-02,	COMPANY NAME FMC Corporation Agricultural Products Group
dog tick nymphs and adults in turfgrass. CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo-propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and directions. Similarly, the data presented in MRID No. 441374-02,	SUBMISSION PURPOSE Provide performance data in support of claims to
CHEMICAL & FORMULATION Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo-propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and directions. Similarly, the data presented in MRID No. 441374-02,	control deer tick larvae and nymphs and American
methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclo-propanecarboxylate* *Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid) imum, trans isomers 3% maximum CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, Ixodes dammini, in turfgrass for the subject product when applied according to label rates and directions. Similarly, the data presented in MRID No. 441374-02,	dog tick nymphs and adults in turfgrass.
(MRID) Number 441374-01, having been obtained from a standard field test meeting the definitions of § 95-11(a)(1) and (6) on p. 267, requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, <u>Ixodes dammini</u> , in turfgrass for the subject product when applied according to label rates and directions. Similarly, the data presented in MRID No. 441374-02,	*Cis isomers 97% min-(0.667 lb. active per gallon flowable liquid)
harring boon obtained from a grandard field foot mosting the same	requirements of § 95-11(b)(1), (3)-(4) and (6)-(7) on p. 268 and the standard of § 95-11(c)(2)(i) and (ii)(A)(b) on p. 270 of the Product Performance Guidelines as well as the application technique of § 95-4(a)(1) and (5) on p. 246, are adequate to support a claim for control of nymphal deer tick, <u>Ixodes</u> dammini, in turfgrass for

RL Vern L. McFarland, IRB

definitions, requirements and standard, are adequate to support a claim for control of nymphs and adults of the American dog tick, Dermacentor variabilis, in turfgrass for the subject product when applied according to label rates and directions.